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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,332	12/31/2003	Ellen O. Aeling	59054US002	4681

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EXAMINER
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BLACKMAN, ROCHELLE ANN J

ART UNIT	PAPER NUMBER
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2851

DATE MAILED: 06/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/750,332

Applicant(s)

AELING ET AL.

Examiner

Rochelle Blackman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-27 is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-16, 20 and 21 is/are rejected.
- 7) ☒ Claim(s) 8 and 17-19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 22, 2006 has been entered.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Objections***

Claims 8 and 17-19 are objected to because of the following informalities: in claim 8, line 2, "diffuser" should be -diffuser screen-; and claims 17-19 recite the limitation "the diffuser screen" in line 2 of the claims. There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-4, 11, 14-16, 20, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Andriash (U.S. Patent No. 6,030,687).

Regarding claim 1, Andriash discloses a dual display system having first and second opposite sides (see FIGS. 1-8), the dual display system comprising: a graphic article (for example, see *an image formed over top the retroreflective particles using colored light permeable translucent inks or films to form an image thereon* in the abstract and see *first image* in col. 6, lines 20-25, along with 12 and 12a of Figs. 1-8) providing a first display on the first side of the dual display system in a first lighting condition (see col. 2, lines 61-67 and col. 7, lines 6-11); and a projection system (for example, see *opaque sheet material coated with retroreflective light reflecting particles and a dark opaque color on the reverse side thereof* in the abstract, and see *retroreflective sheet material, opaque vinyl containing glass beads, metallizing or other retroreflective particles* in col. 6, lines 20-23, along with see 12 and 12a of Figs. 2-8) providing a projected image, series of images or full motion video (see 48 of Fig. 7, see *second image* in col. 6, lines 36-52) from the second side of the dual display system to provide a second display on the first side of the dual display system in a second lighting condition (see col. 2, line 67 to col. 3, line 5 and col. 7, lines 11-15).

Regarding claims 2 and 15, Andriash discloses wherein the graphic article is a unidirectional graphic article (see col. 15, lines 15-20).

Regarding claims 3 and 16, Andriash discloses wherein the graphic article is a perforated imaged film (see 11, 12, and 12a of FIGS. 1-7).

Regarding claim 4, Andriash discloses wherein the first lighting condition is a high brightness viewing condition (see col. 2, lines 61-67 and col. 7, lines 6-11) and the second lighting condition is a low brightness viewing condition (see col. 2, line 67 to col. 3, line 5 and col. 7, lines 11-15).

Regarding claim 11, Andriash discloses wherein the second display provided by the projection system is at least one fixed image (see 48 of Fig. 7, see *second image* in col. 6, lines 36-52).

Regarding claim 14, Andriash discloses a dual display article (for example, see Figs. 7 and 8) for attachment to a window substrate (see 18 of Figs. 2-6), comprising: a graphic article (for example, see *an image formed over top the retroreflective particles using colored light permeable translucent inks or films to form an image thereon* in the abstract and see *first image* in col. 6, lines 20-25, along with 12 and 12a of Figs. 1-8) providing a first display viewable from a first direction in a high brightness condition (see col. 2, lines 61-67 and col. 7, lines 6-11); and a diffuser (for example, see *opaque sheet material coated with retroreflective light reflecting particles and a dark opaque color on the reverse side thereof* in the abstract, and see *retroreflective sheet material, opaque vinyl containing glass beads, metallizing or other retroreflective particles* in col. 6, lines 20-23, along with 12 and 12a of Figs. 2-8) attached to the graphic article for receiving

and displaying a projection (see 48 of Fig. 7, see *second image* in col. 6, lines 36-52) from a second direction opposite the first direction to provide a second display viewable from the first direction in a low brightness condition (see col. 2, line 67 to col. 3, line 5 and col. 7, lines 11-15).

Regarding claim 20, Andriash wherein the high brightness condition is daylight (see col. 2, lines 61-67 and col. 7, lines 6-11 – the condition described is considered to be “daylight”) and the low brightness condition is nighttime (see col. 2, line 67 to col. 3, line 5 and col. 7, lines 11-15 – the condition described is considered to be “nighttime”).

Regarding claim 21, Andriash discloses wherein the graphic article is attachable to an inside surface of the window substrate (see col. 6, lines 20-32 and Fig. 7– the “graphic article”, which is the *first image* is formed on the retroreflective sheet material 12a, which is the “diffuser”, and is covered by clear transfer adhesive 13a which is then attached to the inside of a display window, which would be one like element 18 in Figs. 2-6) and the diffuser is attached to the graphic article opposite from the window substrate (see location of retroreflective sheet material 12a, which is the “diffuser”, relative to previously stated location of the *first image* and the display window).

2. Claims 1-4, 11, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Hill (U.S. Patent No. 6,212,805).

Regarding claim 1, Hill discloses a dual display system having first and second opposite sides (see FIGS. 1-8), the dual display system comprising: a graphic article (for example, see 16, 22 of FIG. 3A-B, 5A-C, 6A-B, 44, 46 of FIG. 7A, and 62, 64, 68 of FIG. 7B, see *primary design* in col. 15, line 54 to col. 16, line 3 and see *base pattern* in

col. 17, lines 39-54) providing a first display on the first side of the dual display system in a first lighting condition (for example, see *daylight* in col. 15, line 54 to col. 16, line 3 and col. 17, lines 39-54); and a projection system providing a projected image, series of images or full motion video (for example, see 16 in FIGS. 3A-B, 5A-C, 6A-B, 48 in FIG. 7A, and 68 in FIG. 7B, see *secondary design* in col. 15, line 53 to col. 16, line 3, and see *projected design and images may be projected on the panel...* in col. 17, lines 39-54) from the second side of the dual display system to provide a second display on the first side of the dual display system in a second lighting condition (for example, see *hours of darkness* in col. 15, line 53 to col. 16, line 3 and col. 17, lines 39-54).

Regarding claim 2, Hill discloses wherein the graphic article is a unidirectional graphic article (for example, see col. 1, lines 27-30 and lines 51-54, and col. 14, lines 29-35).

Regarding claims 3, Hill discloses wherein the graphic article is a perforated imaged film (for example, see 22 of FIG. 3A-B, 5A-C, 6A-B, 44, 46 of FIG. 7A and see col. 20, lines 36-44).

Regarding claim 4, Hill discloses wherein the first lighting condition is a high brightness viewing condition (see *daylight* in col. 15, line 54 to col. 16, line 3 and col. 17, lines 39-54) and the second lighting condition is a low brightness viewing condition (see *hours of darkness* in col. 15, line 53 to col. 16, line 3 and col. 17, lines 39-54).

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Regarding claim 11, Hill discloses wherein the second display provided by the projection system is at least one fixed image (see *secondary design, for example the indicia NIGHT SHOP* in col. 15, line 53 to col. 16, line 3).

Regarding claim 13, Hill discloses wherein the first display conveys information relevant to a time period associated with the first lighting condition (see *primary design and hours of daylight* in col. 15, line 54 to col. 16, line 3) and the second display conveys information relevant to a time period associated with the second lighting condition (for example, see *secondary design, for example the indicia NIGHT SHOP and hours of darkness* in col. 15, line 53 to col. 16, line 3).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 5, 7, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andriash (U.S. Patent No. 6,030,687) in view of Hill (U.S. Patent No. 6,212,805).

Andriash discloses the claimed invention including {claim 5} the projection system comprising a diffuser screen (see *opaque sheet material coated with retroreflective light reflecting particles and a dark opaque color on the reverse side thereof* in the abstract, and see *retroreflective sheet material, opaque vinyl containing*



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*glass beads, metallizing or other retroreflective particles* in col. 6, lines 20-23, along with see 12 and 12a of Figs. 2-8); {claim 7} wherein the graphic article is attached to an inside surface of a window substrate (see col. 6, lines 20-32 – the “graphic article”, which is the *first image* is formed on the retroreflective sheet material 12a, which is the “diffuser”, and is covered by clear transfer adhesive 13a which is then attached to the inside of a display window, which would be one like element 18 in Figs. 2-6); {claim 9} wherein the diffuser screen is a diffusing window substrate (see *opaque sheet material coated with retroreflective light reflecting particles and a dark opaque color on the reverse side thereof* in the abstract, and see *retroreflective sheet material, opaque vinyl containing glass beads, metallizing or other retroreflective particles* in col. 6, lines 20-23, along with 12 and 12a of Figs. 2-8) and the graphic article is attached to an outside surface of the window substrate (for example, see col. 6, lines 20-25 and see FIG. 7 - the *first image* which is the “graphic article” is formed on top of the retroreflective sheet material 12a, which is the “diffuser window substrate”).

Andriash does not appear to disclose the projection system comprising a “projector”.

Hill teaches providing a projection system comprising a projector (see *projected design and images may be projected on the panel...* in col. 17, lines 39-54).

It would have been obvious to one ordinary skill in the art at the time the invention was made to provide the “projection system” of the Andriash reference with a “projector”, as taught by Hill for the purpose of projecting different images related to

different sale promotions for a store, thus facilitating the change in promotional displays for a store.

2. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Andriash (U.S. Patent No. 6,030,687) in view of Hill (U.S. Patent No. 6,212,805) as applied to claim 1 above, and further in view of Gehring et al. (U.S. Patent Application Publication No. 2002/0163722).

Andriash and Hill disclosed the claimed invention except for the projection system being "computer controlled".

Gehring teaches providing a projection system (see 54 of FIG. 5 and see 140 of FIG. 9) that is computer controlled (see 100 of FIG. 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was provided the combined Andriash and Hill reference with "projection system" that is "computer controlled", as taught by Gehring for the purpose of displaying information temporarily and making sure the information is not displayed after the temporary time period (see pg. 8, paragraph [0113], last 4 lines).

3. Claims 10 and 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Andriash (U.S. Patent No. 6,030,687) in view of Gehring et al. (U.S. Patent Application Publication No. 2002/0163722).

Regarding claim 10, Andriash discloses the claimed invention except for the projection system being a "television/computer display".

Gehring teaches providing a projection system that is a television/computer display (see 52, 54 of FIG. 5 and see 140 of FIG. 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was provided the combined Andriash and Hill reference with "projection system" that is a "television/computer display", as taught by Gehring for the purpose of displaying information temporarily and making sure the information is not displayed after the temporary time period (see pg. 8, paragraph [0113], last 4 lines).

Regarding claim 12, Andriash discloses the claimed invention except for the second display provided by the projection system being a "full motion video".

Gehring teaches providing a display (see 52 of FIG. 5) provided by a projection system (see 54 of FIG. 5) that is a full motion video (see pg. 3, paragraph [0045]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the second display provided by the projection system in the Andriash reference, as a "full motion video" as taught by Gehring for the purpose of providing uniformity in some of the elements of information being displayed including the timing and content of the displayed information (see pg. 4, paragraph [0067]).

4. Claims 10 and 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hill (U.S. Patent No. 6,212,805) in view of Gehring et al. (U.S. Patent Application Publication No. 2002/0163722).

Hill discloses the claimed invention except for the projection system being a "television/computer display".

Gehring teaches providing a projection system that is a television/computer display (see 52, 54 of FIG. 5 and see 140 of FIG. 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was provided the combined Andriash and Hill reference with "projection system" that is a "television/computer display", as taught by Gehring for the purpose of displaying information temporarily and making sure the information is not displayed after the temporary time period (see pg. 8, paragraph [0113], last 4 lines).

Regarding claim 12, Hill discloses the claimed invention except for the second display provided by the projection system being a "full motion video".

Gehring teaches providing a display (see 52 of FIG. 5) provided by a projection system (see 54 of FIG. 5) that is a full motion video (see pg. 3, paragraph [0045]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the second display provided by the projection system in the Hill reference, as a "full motion video" as taught by Gehring for the purpose of providing uniformity in some of the elements of information being displayed including the timing and content of the displayed information (see pg. 4, paragraph [0067]).

#### ***Allowable Subject Matter***

1. Claims 22-27 are allowed.
2. Claims 8 and 17-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

3. The following is a statement of reasons for the indication of allowable subject matter:

Claim 8 has been found to be allowable because the prior art of record either alone or in combination neither discloses nor makes obvious the dual display system comprising the combination of the particular feature of the graphic article being attached to an outside surface of a window substrate and the particular feature of the diffuser being attached to an inside surface of the window substrate, further in combination with the particular combination of features recited in claim 1.

Claim 17 has been found to be allowable because the prior art of record either alone or in combination neither discloses nor makes obvious the dual display article comprising the particular feature of the graphic article having a perforation of 10%-70% an the diffuser screen having a transmission of 20%-90%, in combination with the particular combination of features recited in claim 14.

Claims 18 and 19 depend on claim 17 and are therefore allowable.

Claims 22 have been found to be allowable because the prior art of record either alone or in combination neither discloses nor makes obvious the method comprising the combination of the particular method step of attaching a perforated image film to a first side of a transparent substrate and the particular method step of attaching the diffuser screen to a second side of the transparent substrate opposite the first side of the transparent substrate, further in combination with the other particular combination of features recited in claim 22.

Claims 23-27 depend on claim 22 and are therefore allowable.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rochelle Blackman whose telephone number is (571) 272-2113. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Rochelle Blackman' followed by a stylized flourish.

Rochelle Blackman  
Patent Examiner